

## **Windsor BOE Technology Committee Meeting**

Thursday, March 21, 2013 5:30 PM

Technology Committee, L.P. Wilson Community Center, Room 17, 601 Matianuck Avenue, Windsor, CT 06095

1. **Call to Order, Pledge of Allegiance, Moment of Silence**
2. **Discussion and Review of Network Security**
3. **Demonstration of Edline Learning Community Management System, Mileposts Data Management Software, and Measures of Academic Progress (MAP) Computerized Adaptive Testing**
4. **Discussion on Student Access to Technology**
5. **Adjournment**

# MAKING PROGRESS:

## **Rethinking State and School District Policies Concerning Mobile Technologies and Social Media**



## BACKGROUND



It is commonly recognized that our nation's progress depends on improving learning, thereby creating healthier communities and a stronger workforce. In today's world, that requires us to take advantage of new learning tools to ensure that our children's learning is practical and prepares them for the challenges of the 21st century. The advantages of digital media now greatly outweigh the disadvantages and require that schools update their thinking and policies to provide guidance on the use of these tools to improve student learning and achievement.

In 2000, when the Children's Internet Protection Act (CIPA) was first enacted, the major concern on the part of legislators and education policymakers was to protect children from viewing pornography on the Internet. A decade later, the nature and scope of digital media differs sharply from what existed in 2000. Mobile devices, social media, and other Web 2.0 applications have become mainstream in many sectors of society, and an increasing number of educators are demonstrating the power of these applications to enrich the learning environments in their classrooms.

There is a growing recognition on the part of teachers, education support professionals, school administrators, and prominent educational experts that emerging digital technologies are here to stay and, when used properly, can offer substantial educational benefits. These benefits, however, are not without some risks. Recent abuses of social media have prompted a number of state legislatures and boards of education to consider enacting legislation or policies to respond to concerns about the use of digital media to harass, bully, or make inappropriate sexual contact with children. **Before steps are taken to impose limits on the use of social media and mobile technologies in schools, policymakers and educators need to consider the consequences for learning that such restrictions would produce.** In this document, we argue that such action should carefully consider the advantages of social media for learning and that these guidelines for responsible use bring media into mentored environments where they can be safely explored and shared.

Many of the problems raised by these new technologies – from bullying to engaging in risky behavior – are not new to the public discourse, but are merely being delivered in different media. The challenge to responsible educators remains the same: to provide stimulating and safe learning environments that support the acquisition of practical skills necessary for full participation as a 21st-century citizen. Achieving this without mentored use of new technologies seems both impractical and counterproductive. **One of the most powerful reasons to permit the use of social media and mobile devices in the classroom is to provide an opportunity for students to learn about their use in a supervised environment that emphasizes the development of attitudes and skills that will help keep them safe outside of school.** A popular analogy is to driver's education, where behind-the-wheel training is as important as the more theoretical study of the "rules of the road." To advance thinking about the issues involved, we offer a summary of the emerging themes in educational uses of social media and conclude with recommendations for responsible use policies.

## PURPOSE OF THIS DOCUMENT

In December 2011, the Consortium for School Networking (CoSN) and the FrameWorks Institute invited senior-level representatives from state and national organizations to a meeting in Washington, D.C., that was supported by a grant from the MacArthur-UCHRI Digital Media and Learning Research Hub at the University of California, Irvine. The goal of the workshop was to develop a resource to assist educational leaders and policymakers in developing sound and practical policies for our increasingly connected learning environment. This document, which resulted from the workshop, is not intended as a prescriptive policy statement; *rather, its purpose is to help inform policymakers and educators as they develop or reconsider policies addressing new digital media in the context of improved learning.*

## SOCIAL MEDIA AND MOBILE TECHNOLOGIES DEFINED

Social media is defined as the set of applications for digital devices that enable the creation and exchange of user-generated content. The most widely used social media applications today are Facebook and Twitter, but there are hundreds of other specialized versions. For example, Biomed Experts is used by scientists and Sermo by physicians to collaborate and exchange information. A large number of social media applications exist especially for younger users – including preteen consumer networks such as Kidswirl, Togetherville, and Imbee. The education-oriented Edmodo, Gagggle, and many others are designed especially for K–12 schools.

Mobile technologies are devices with Internet connectivity that can be held easily in one's hand. Examples include iOS and Android smart phones, tablets such as the iPad or Samsung Galaxy, and e-readers such as Kindle Fire or Nook.

## CRITICAL OBSERVATIONS

### 1. The use of mobile Internet devices and social media by young people is widely prevalent. The use of student-owned mobile devices for classroom instruction is growing, and more schools are moving from policies that ban their use to integrating them in the classroom.

Workshop participants believed that the following observations are particularly relevant to state and local decision-makers as they consider policy pertaining to social media and mobile technologies in K–12 schools.

According to recent surveys by the Pew Research Center Internet & American Life Project, 95 percent of all teens (ages 12–17) use the Internet on a regular basis, 80 percent of them use social networking sites, and 75 percent have cell phones. With these numbers growing steadily, Internet and cell phone access by young people in their lives outside of school is rapidly approaching the point at which it might be viewed as nearly universal.

What about school use? According to research done by the Pew Internet & American Life Project, the majority of students report that they are able to bring their cell phones to school but must keep them off when they are in class. This policy environment appears to be changing. Although exact figures are lacking, it is clear that the number of school districts that permit students to use their own mobile devices in the classroom is rising steadily. The growing popularity of “bring your own technology” (BYOT) programs is fueled, in part, by the idea that allowing student-owned devices to supplement school-purchased technology can help cut costs in these financially tight times and, in part, by the realization that learning can benefit from technology when students are mentored in appropriate applications. By taking advantage of student interest in technology, schools stand to benefit from more teachable moments in and out the classroom and to support and create personalized learning that is guided by teachers and peers.



## 2. Students and schools experience substantial educational benefits through the use of mobile devices and social media.

As technology improves and expanded availability make the use of mobile devices and social media in the classroom increasingly viable, many K–12 educators are embracing the new teaching and learning opportunities that result. Among other things, these technologies allow students to:

- Bridge the gap between formal (in-school) and informal (out-of-school) learning, improving their preparation for real world experience;
- Construct their own learning environments to help them achieve academically and acquire the skills necessary for the 21st century; Connect instantly with peers, experts, and information resources beyond the school walls;
- Provide real-time feedback, exchange information, and receive assessments during classroom instruction through a text message or Twitter “back channel”;
- Document their work through images taken on and off campus;
- Receive and submit homework assignments digitally;
- Learn how to utilize mobile devices and social networking as tools for lifelong learning.

Examples: [Institute of Play](#), [Project Based-Learning](#), [The Hive Learning Network NYC](#), [SMALlab Learning](#), [Conservation Connection](#), [Digital Youth Network](#).

## 3. Current federal, state, and local policies and procedures need modification or clarification in order to respond to current realities.

If schools are to realize the advantages that social media bring to the field of learning and to update their curricula appropriately, more practical guidelines must be developed. The Children’s Internet Protection Act (CIPA) is never far from the minds of K–12 leaders as they attempt to revise policies and make decisions regarding the educational use of social media and mobile devices. Until recently, CIPA was viewed as severely limiting the use of these technologies by schools that are supported in any way through E-rate funding. Requests from a number of parties led to a recent revision by the FCC, which administers the E-rate. In August 2011, the FCC issued a [Report and Order](#) that included the following language: Although it is possible that certain individual Facebook or MySpace pages could potentially contain material harmful to minors, we do not find that these websites are per se “harmful to minors” or fall into one of the categories that schools and libraries must block. The FCC revision did not address the [request from the U.S. Department of Education](#), as part of its National Education Technology Plan, that E-rate provisions and CIPA requirements should be clarified and barriers to student-owned devices in schools removed, but did promise to return to that topic at a future time.

The FCC order also strengthened earlier language and requirements for schools receiving E-rate funding to show that they have in place an Internet safety program that educates minors about *appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms, as well as cyberbullying awareness and response*. This education program must be in place by July 2012. Thus, schools have a legal responsibility and ethical opportunity to implement processes and programs to instill good habits of technology use in students.



#### 4. There are legitimate concerns about the use of social media that need to be addressed.

Even ardent supporters of social networking and mobile devices in school would agree that it is important to have an awareness of – and plans to prevent and/or deal with – negative behaviors that can be facilitated by such technologies. These include:

- **Sexting:** Sexting involves sending sexually explicit messages or photographs, primarily between mobile phones. According to the Pew Internet & American Life Project's [Teens and Digital Citizenship survey](#), 16 percent of teens 12–17 have received sexually suggestive nude or nearly nude photos or videos of someone else they know. While a relatively small number of young people are involved, sexting can be a serious problem for those sending and receiving such messages.

- **Cyberbullying and harassment:** Some of the highest-profile problems with social media in recent years have involved the use of the technology by students to bully or harass their peers. As with sexting, the overall numbers are not huge, but 20 percent of all teens and 33 percent of younger teenage girls told Pew researchers that peers are mostly “unkind” to one another at social networking sites. These statistics are disturbing, as is the fact that 19 percent of teens report that they have been bullied in the last 12 months – in person, by phone, via text messaging, or online. It is worth noting, however, that the number one form of bullying does not involve technology; 12 percent of the teen respondents said they had been bullied in person, while 9 percent endured bullying via text messaging, 8 percent online (through email, social networking, and so on), and 7 percent over the phone.

- **Inappropriate behavior, compounded by a lack of guidance from the school system,** is likely to have negative consequences, regardless of the venue in which it occurs. Technology is no exception. The rules we make to structure appropriate interactions need to recognize the shared responsibility that all adults in a young person's life must assume. Accountability for addressing such behaviors should include but not be limited to social media.

- **Poor judgment by youth about how much to share online:** Young people can find themselves making unwise decisions about what to share given their inexperience and naivety. Without an awareness of privacy issues, young people risk providing photos or information about themselves that could harm them, their reputations, or future opportunities. It is important to recognize the risk of providing an opening for predators looking to make contact for harmful purposes. Responsible use of social media requires young people to recognize and protect themselves from such dangers. This problem largely lies outside of school, rather than in it, but educators and policymakers need to identify strategies to help students and parents minimize risk and recognize the limits they must place on themselves when acting in these public forums.

#### 5. Equity is a vital issue to consider when establishing policy around social media and mobile technologies.



As we move forward with the latest technologies, we must keep sight of the crucial issue of digital equity. It is important to consider the availability of loaner equipment and school-owned devices that are accessible to lower-income students in a stigma-free manner. BYOT implementations have the potential to increase the digital divide that earlier one-to-one initiatives were designed to narrow. Furthermore, digital equity issues are not limited to the devices students have access to, but also touch on ways of making Internet access and adequate bandwidth available to all students – at school and at home. Failure to address this will create a critical fault line in the differential learning opportunities available to students and, potentially, leave some groups of students ill prepared to join our country's 21st-century workforce.

## SUGGESTIONS

Compliance with CIPA and E-rate guidelines is essential to schools, of course, but it is also clear that much of the responsibility for defining acceptable use, and setting policy that is both appropriate for today's technology-enhanced learning environment and sufficiently flexible to respond to tomorrow's developments, remains with states and individual districts. Some suggestions to policymakers as they navigate these waters:

- **Banning is not the answer:** Until recently, many districts have banned the use of social networking sites such as Facebook. As schools across the country have begun reconsidering their policies and opening the doors to social media, a few high-profile cases with negative consequences have prompted states to consider imposing statewide bans. So far, such efforts have been met with resistance and have led to efforts to find a more balanced approach. In Missouri, for example, certain provisions of a newly enacted law that barred teachers from having contact with students through social media sites were blocked by the courts and then repealed through the governor's initiative. Rhode Island's "Safe School Act," which was originally opposed by educators and community members who had been told it would impose a ban on social networking in schools, eventually passed with no such provision. Instead, according to eSchool News, the bill's author said that the Safe School Act, which focused primarily on the issue of cyberbullying, was intended to *encourage [social media use] for educational purposes*. Policymakers in both states, much like the FCC through its guideline changes described earlier, shifted focus from an attempt to establish centralized rules to a requirement that individual districts set their own policies regarding social networking and other technology use.
- **Rethink and revise the district AUP (Acceptable Use Policy):** Many school districts are moving in the direction suggested by the shift described above: dropping the bans and, instead, focusing on policy goals that go beyond the narrow set of website access issues that were the primary focus of many earlier AUPs. One example is the Guidelines for the [Prevention of Sexual Misconduct and Abuse in Virginia Public Schools](#), shared by presenters at the Washington, D.C., workshop. CoSN's Jim Bosco and Keith Krueger proposed in a recent [Education Week](#) commentary that school systems should move beyond the traditional AUP approach – which has students and family members sign a form “accepting” certain rules, with little action required after that – to a “responsible-use policy” (RUP) that emphasizes education and *treats the student as a person responsible for ethical and healthy use of the Internet and mobile devices. Staff, too, should be signatories of such responsible-use policies.*
- **Take the opportunity to educate students:** The new FCC E-rate requirements outlined in the August 2011 Report and Order reinforce what many educators already believe is the key to online safety and security: adequate student education. In fact, some would argue that one of the most powerful reasons to permit the use of social media and mobile devices in the classroom is to provide an opportunity for students to learn about their use in a supervised environment that emphasizes the development of attitudes and skills that will help keep them safe outside of school. A number of schools across the nation, as well as some organizations, have developed programs on digital literacy and safe Internet use to help students learn how to use social media and other Internet content in a safe, effective, and appropriate way.

• **Emphasize professional development:** Professional development for all stakeholder groups is key to the effective support of social media and mobile technologies in the classroom. Today's technology-related professional development must emphasize not only technology integration and continuous improvement, but also the ethical, legal, and practical issues related to social networking and mobile devices in the classroom. Professional development must explore effective activities and approaches for conveying this information to students.

## MAKING PROGRESS

Mobile Internet technologies and social media present new challenges and powerful learning opportunities for K–12 students and educators. No era in history has come close to the quality and volume of learning resources that are at our fingertips. Informed leadership from all key stakeholders is required to seize the learning opportunities while minimizing the risks. This document is offered as a resource for doing so.

**This document was possible through an award from the MacArthur-UCHRI Digital Media and Learning Research Hub at the University of California, Irvine.**





## REAL-WORLD SNAPSHOTS

### Bring Your Own Technology (BYOT)

#### Fairfax County Public Schools

Falls Church, Virginia

Fairfax County

Number of Students: 176,138

Percentage of free/reduced lunch: 26.18%

This district is bringing transformation to new levels for their students and staff. Schools are pioneering several innovative programs, including eTextbooks and a comprehensive system of delivering digital curricular resources. Staff's extensive use of social and digital media speaks to the open culture that district policies and practices have built.

In Fairfax County Public Schools, the use of student-owned computing devices is an institutional imperative endorsed by the Superintendent and School Board. Implementation of BYOT across the school district began with various pilot projects. From these experiences a solution was designed, which led to the following changes:

- Network enhancements were implemented, in particular to the wireless infrastructure;
- Policies such as the Student Acceptable Use Policy (AUP) were updated;
- Technical bulletins were created to define procedures for using privately owned computing devices;
- Best practices were distributed; procedures and accompanying contract vehicles were established for purchasing devices for those in need;
- An Ideal Use Matrix was created to help school leaders make informed decisions on how to integrate student-owned devices into each school's instructional priorities.

FCPS encourages the use of social media for instructional purposes and provides Web 2.0 tools within a secure environment for K–12 students and for all teachers and administrative staff. Through FCPS 24-7 Learning, the Blackboard learning management system, Wikis, podcasts, and blogs are available to incorporate into instruction. An additional capability is the ability to search FCPS-created Web 2.0 content. Through FCPS Google Apps for Education, students, faculty, and staff have the ability to communicate, store files, and collaborate on documents, spreadsheets, and presentations in real time from school, work, or home, all within a secure “closed campus” online environment.



## REAL-WORLD SNAPSHOTS

### Trust and Participation

#### [New Canaan Public Schools](#)

New Canaan, Connecticut  
Fairfield County  
Number of Students: 4,076

One of the reasons for moving many curriculum activities online and “onto the cloud” in Connecticut’s New Canaan Schools was a logistical one: it helped create an “anytime, anywhere, anyhow” environment.

As a result, teachers can post assignments and students can work on them at night – alone or as a group. Teachers can monitor student progress on projects or edit student writing from home. “The use of social networking and other Web 2.0 tools has enabled a collaborative culture for teachers and administrators,” says Rob Miller, director of technology. Using tools such as Diigo, Google Earth, and Google Docs, students collaborate on projects across the curriculum. For example, before reading the book *Night* by Holocaust survivor Elie Wiesel, students worked in groups to research and create a Google Earth “stop” for each location in the story so that classmates had easy access to important information as they read. Students are often grouped with peers in classes other than their own. “They find it challenging to work with online partners and peers they hardly know,” says Cathy Swan, technology integration specialist, “but they’re adjusting and developing important skills. Teachers, too, are collaborating online. It’s truly a 21st-century workplace model.”

According to the New Canaan administrators, online safety issues are not about blocking, they’re about safety education – which begins in second grade with help from i-SAFE curriculum materials, modified for local use. By high school, safety and acceptable use discussions are incorporated into every single online project.

“Every time they get ready to post something online,” Swan says, “we talk about what they’re sharing and what permissions they’re going to include. We remind the students that what they put on the Internet doesn’t stay there.”

“Parents support our decision to open our network to social networking and Web 2.0 applications,” adds Miller, who frequently attends meetings to educate parents and keep them informed. “They are delighted and relieved that we are taking their kids to these sites and teaching them the responsible, ethical, safe, and legal way to use them.”



## RESOURCE DIRECTORY

### Social Media and Mobile Technologies in Schools

- Enews (July 10, 2008). Educational benefits of social networking sites.  
Retrieved from [http://www1.umn.edu/news/features/2008f/UR\\_191308\\_REGION1.html](http://www1.umn.edu/news/features/2008f/UR_191308_REGION1.html)
- Ferriter, W., Ramsden, J., Sheninger, E. (2011). Communicating and Connecting with Social Media. NAESP.
- FrameWorks Institute. Digital Media and Learning.  
Retrieved from <http://www.frameworksinstitute.org/digitalmedia.html>
- FrameWorks Institute. How Americans Think about Digital Media and Learning (video).  
Retrieved from <http://www.frameworksinstitute.org/index.php?id=224>
- Kendall-Taylor, N., Lindland, E., Mikulak, A. Faster and Fancier Books: Mapping the Gaps Between Expert and Public Understandings of Digital Media and Learning. FrameWorks Institute.  
Retrieved from <http://www.frameworksinstitute.org/index.php?id=224>
- Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickuhr, K., Rainie, L. (November 9, 2011). Teens, kindness and cruelty on social network sites.  
Retrieved from <http://www.pewinternet.org/Reports/2011/Teens-and-social-media/Methodology.aspx?view=all>
- NASSP. Using Mobile and Social Technologies in Schools.  
Retrieved from [http://www.nassp.org/Content.aspx?topic=Using\\_Mobile\\_and\\_Social\\_Technologies\\_in\\_Schools](http://www.nassp.org/Content.aspx?topic=Using_Mobile_and_Social_Technologies_in_Schools)
- Rogers, K. (2011). Mobile Learning. NAESP.

### Benefits of BYOT

- Forsyth County Schools, Ga. (video).  
Retrieved from <https://fcschoolsga.eduvision.tv/default.aspx?q=3SfVi13w17SmZEIpTemLWg%3D%3D>
- New Canaan Public Schools, Conn. (video). Retrieved from <http://www.youtube.com/watch?v=0Pag2ikpG38>
- Quillen, A. (October 15, 2010). Schools Open Doors to Students' Mobile Devices. Education Week, Digital Directions. Retrieved from <http://www.edweek.org/dd/articles/2010/10/20/01mobile.h04.html>
- Quillen, A. (October 17, 2011). Districts Tackle Questions Surrounding BYOT Policy (Article). Education Week, Digital Directions. Retrieved from <http://www.edweek.org/dd/articles/2011/10/19/01byot.h05.html>

### Technical Issues

- U.S. Department of Education. Unpacking the Challenge.  
Retrieved from <http://www.ed.gov/technology/netp-2010/unpacking-challenge>
- Wegner, P. (November 19, 2010). How School Wireless Networks CAN support student owned mobile devices. Secure Edge Networks. Retrieved from <http://www.securedgenetworks.com/secure-edge-networks-blog/bid/50000/How-School-Wireless-Networks-CAN-support-student-owned-mobile-devices>

### Examples of Acceptable/Responsible Use Policies

- Bosco, J. (February 2011). Acceptable Use Policies in the Web 2.0 and Mobile Era, CoSN.  
Retrieved from <http://www.cosn.org/Initiatives/ParticipatoryLearning/Web20MobileAUPGuide/tabid/8139/Default.aspx>
- Bosco, J., Krueger, K. (July 20, 2011). Moving from "Acceptable" to "Responsible" Use in a Web 2.0 World (commentary). Education Week. Retrieved from <http://www.edweek.org/ew/articles/2011/07/20/37bosco.h30.html?tkn=MYSFJgUVhy4kLgyFyf1UVVAqG141KG%2FUGxI.2&print=1>
- Maine Learning Technology Initiative. Professional Development: teachers involved in 1:1.  
Retrieved from <http://maine121.org/>
- New Canaan Public Schools. Information and Communications Technologies, Acceptable Use Policies Guidelines.  
Retrieved from <http://www2.newcanaan.k12.ct.us/education/page/download>

### Government Laws, Guidelines, and Programs

- FCC. Guide to the Children's Internet Protection Act.  
Retrieved from <http://www.fcc.gov/guides/childrens-internet-protection-act>



## RESOURCE DIRECTORY

- Cator, K. Dispelling Myths about Blocked Content. Transcript of interview.  
Retrieved from <http://mindshift.kqed.org/2011/04/straight-from-the-doe-facts-about-blocking-sites-in-schools/>
- OnGuardOnline.gov. Practical tips from the federal government to help you be on guard against Internet fraud, secure your computer, and protect your personal information. Provides tips for educating about children's Internet safety. Retrieved from <http://www.ftc.gov/bcp/edu/microsites/onguard/>
- U.S. Department of Education. National Education Technology Plan 2010.  
Retrieved from <http://www.ed.gov/technology/netp-2010>

### Information on Digital Citizenship/Safety Education

- Common Sense Media. Free digital citizenship resources for educators.  
Retrieved from <http://www.commonsensemedia.org/educators>
- iSafe. Subscription-based media literacy and digital citizenship education materials.  
Retrieved from <http://www.isafe.org/>

### Organizations

- American Association of School Administrators – <http://www.aasa.org/>
- Consortium for School Networking – <http://www.cosn.org/>
- Edutopia – <http://www.edutopia.org/>
- FrameWorks Institute – <http://www.frameworksinstitute.org/>
- Digital media & learning, John D. & Catherine T. MacArthur Foundation – [http://www.macfound.org/site/c.1kLXJ8MQKrH/b.946881/k.B85/Domestic\\_Grantmaking\\_Digital\\_Media\\_Learning.htm](http://www.macfound.org/site/c.1kLXJ8MQKrH/b.946881/k.B85/Domestic_Grantmaking_Digital_Media_Learning.htm)
- Institute of Play – <http://www.instituteofplay.org/work/>
- National Association of Elementary School Principals – <http://www.naesp.org/>
- National Association of Secondary School Principals – <http://www.nasspconference.org/>
- National Education Association – <http://www.nea.org/>
- National School Boards Association – <http://www.nsba.org/>
- National Association of State Boards of Education – <http://www.nasbe.org>
- Partnership for 21st Century Skills – <http://www.p21.org/>
- Pew Research Center's Internet & American Life Project – <http://www.pewinternet.org/>
- State Educational Technology Directors Association – <http://www.setda.org/>

### References

- Digital Youth Network. Retrieved from <http://www.digitalyouthnetwork.org/>
- Edutopia (March 2, 2009). Project-Based Learning Introduction Video.  
Retrieved from <http://www.edutopia.org/project-based-learning-introduction-video>
- Federal Communications Commission (August 11, 2011). Schools and Libraries Universal Service Support Mechanism, a National Broadband Plan for Our Future, Report & Order.  
Retrieved from [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2011/db0819/FCC-11-125A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2011/db0819/FCC-11-125A1.pdf)
- Institute of Play. Projects. Retrieved from <http://www.instituteofplay.org/work/>
- Lenhart, A., Ling R., Campbell, S. Purcell, K. (April 10, 2010). Teens and Mobile Phones. Pew Research Center's Internet & American Life Project.  
Retrieved from <http://www.pewinternet.org/Reports/2010/Teens-and-Mobile-Phones.aspx>
- Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickuhr, K., Rainie, L. (November 9, 2011). Teens, kindness and cruelty on social network sites.  
Retrieved from <http://www.pewinternet.org/Reports/2011/Teens-and-social-media/Methodology.aspx?view=all>
- SmallLab Learning. Retrieved from <http://smallablearning.com/>
- The Field Museum. Conservation Connection.  
Retrieved from <http://fieldmuseum.org/schools/conservation-connection>
- The Hive Learning Network NYC. Retrieved from <http://explorecreateshare.org/about/>
- U.S. Department of Education. Unpacking the Challenge.  
Retrieved from <http://www.ed.gov/technology/netp-2010/unpacking-challenge>



This document was possible through an award from the MacArthur-UCHRI Digital Media and Learning Research Hub at the University of California, Irvine.



CoSN's Participatory Learning in Schools: Policy & Leadership initiative is based on the recognition that mobile devices and Web 2.0 tools provide powerful learning resources for our children and thus prepare them for the world beyond the classroom. The purpose of this initiative, which is sponsored by The Digital Media and Learning Initiative from The John D. and Catherine T. MacArthur Foundation is to assist schools to adapt to this new reality.

